

**PYROGLYPHUS MORLANI, A NEW GENUS AND SPECIES OF MITE FORMING A NEW FAMILY, PYROGLYPHIDAE, IN THE ACARIDIAE**

ACARINA, SARCOPTIFORMES

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As has been noted by many workers the genital opening of the female Acaridiae, both free living and parasitic, are important in family and superfamily diagnosis. Female genitalia of known families range from simple longitudinal or transverse slits to those with lateral and epigynal plates which form an anteriorly pointing triangle. A series of mites with an extreme form of genitalia was discovered some years ago in rodents' nests in New Mexico by H. B. Morlan of the U. S. Public Health Service. The genital opening is bell shaped and is covered by a sclerotized plate which is hinged posteriorly. The shield is similar in appearance and action to those of the uropodid mites. There are no visible lateral plates. The genital plate bears two pairs of setae posteriorly. In other acarids these setae appear to be at the margins of the lateral plates, or slightly off the plates. Their presence on the genital plate indicates that the laterals are not reduced, but may have been large as in *Chortoglyphus*, and have combined with the epigynal to form the single large plate. This species forms a new family in the superfamily Acaroidea.

**PYROGLYPHIDAE, new family**

This family is distinguished from all others in having a single trap-door like genital plate, in possessing greatly reduced genital discs, and in lacking copulatory tubes.

**Pyroglyphus, new genus**

With the characters of the family.

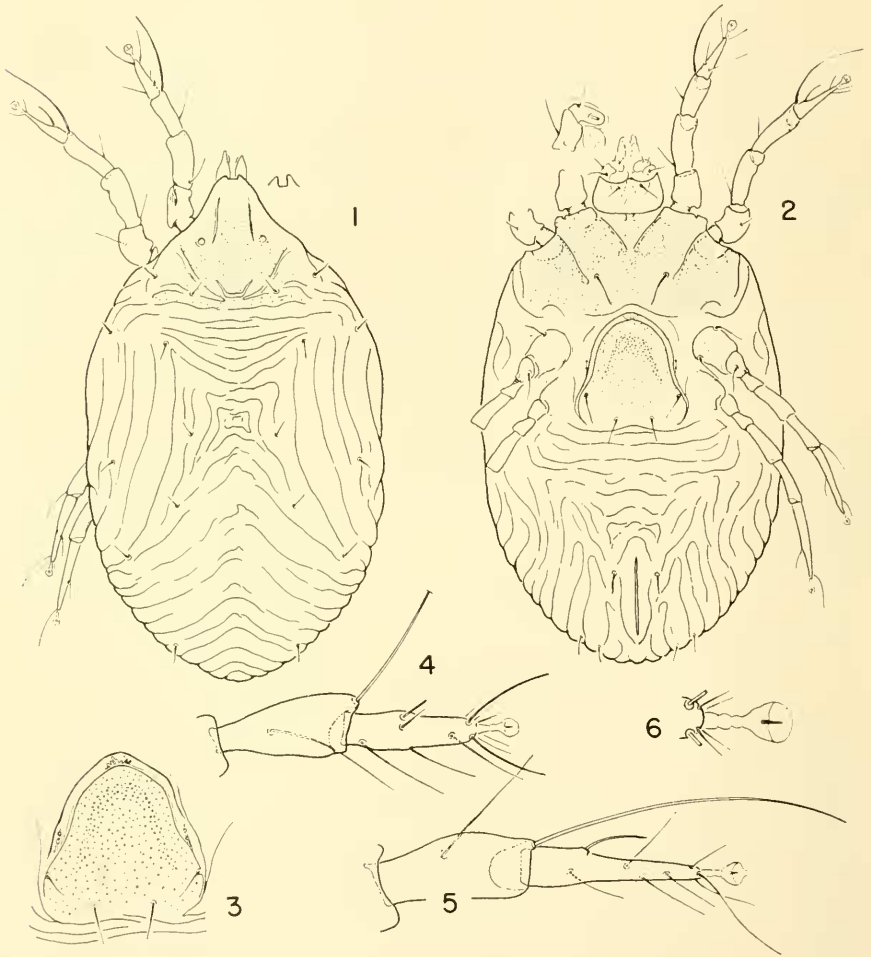
**Pyroglyphus morlani, new species**

*Female*.—These are small, rugose, leathery mites. The propodosoma is smoother than the rest of the dorsum, and possesses a sclerotized shield. The body setae are small, simple, and few in number. Coxal plates I and II are sclerotized across the entire venter. Coxae III and IV are only lightly sclerotized. The genital opening is large, bell shaped, and lies between coxae III and IV. The genital plate is sclerotized and possesses two pairs of setae posteriorly. Two pairs of tiny remnants of genital discs are present. Ventral body setae apparently are missing; a single pair of anal setae are present; two pairs of setae are on the posterior margin of the body. No copulatory tube could be found. The legs are simple, with few setae. The tarsal caruncles are expanded, and have tiny empodial claws. Tarsi I and II each has a single rodlike sensory seta. The chelicerae are chelate; the mouthparts are barely visible from above. The body is 414  $\mu$  long and 255  $\mu$  wide.

*Male*.—Similar to female. The genitalia lie between coxae III and IV. The body is 319  $\mu$  long and 172  $\mu$  wide.

*Types*.—Holotype female, U. S. National Museum No. 2461 was collected in a nest of *Neotoma albigula* Dec. 17, 1951; five female paratypes with the same data; three female paratypes collected in the same habitat Dec. 13, 1951; two female paratypes collected in *Neotoma*

sp. nest Feb. 9, 1953. One male paratype collected in *Neotoma albigula* nest Dec. 13, 1951. Three nymphs collected in the same habitat Jan. 17, 1952. All were collected by H. B. Morlan near Santa Fe, New Mexico.



*Pyroglyphus morlani*, new species, female: fig. 1, dorsum; fig. 2, venter; fig. 3, genital plate; fig. 4, tarsus I; fig. 5, tarsus II; fig. 6, detail of earuncle.